

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF PENNSYLVANIA**

RAIL ASSETS, LLC,)	
)	
Plaintiff,)	2:19-cv-1636-NR
)	
v.)	
)	
WABTEC CORPORATION,)	
)	
Defendant.)	

MEMORANDUM OPINION

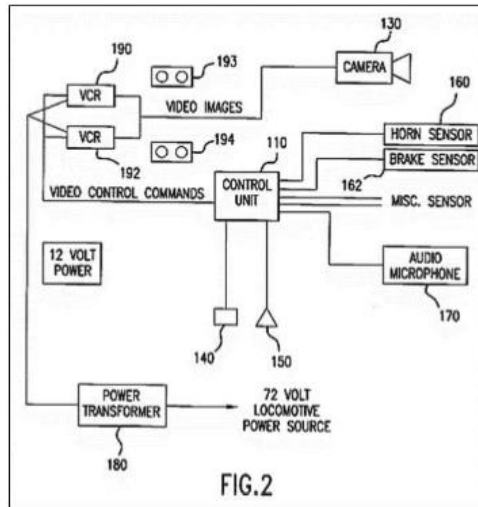
Plaintiff Rail Assets, LLC alleges that Defendant Wabtec Corporation is infringing one of its patents, United States Patent No. 6,088,635. The parties filed a Joint Disputed Claim Terms Chart, identifying three patent terms that require construction. ECF 34. On January 27, 2021, the parties presented a technology tutorial to the Court, followed immediately by a *Markman* claim-construction hearing. ECF 48. The Court is now ready to construe the disputed claims.

BACKGROUND

I. Factual background.

The '635 Patent is entitled "Railroad Vehicle Accident Video Recorder." ECF 1-2. The '635 Patent summarizes the invention as "[a] method and monitoring unit for recording the status of a railroad vehicle prior to a potential accident." *Id.* at Abstract. Before the invention, there was "no existing technology that verifie[d] whistle activation and record[ed] the vehicle speed, time and location of whistle activation as the railroad vehicle approach[ed] the crossing" or that "allow[ed] for the capture and storage of the status of the railroad crossings." *Id.* at 1:26-29, 36-37.

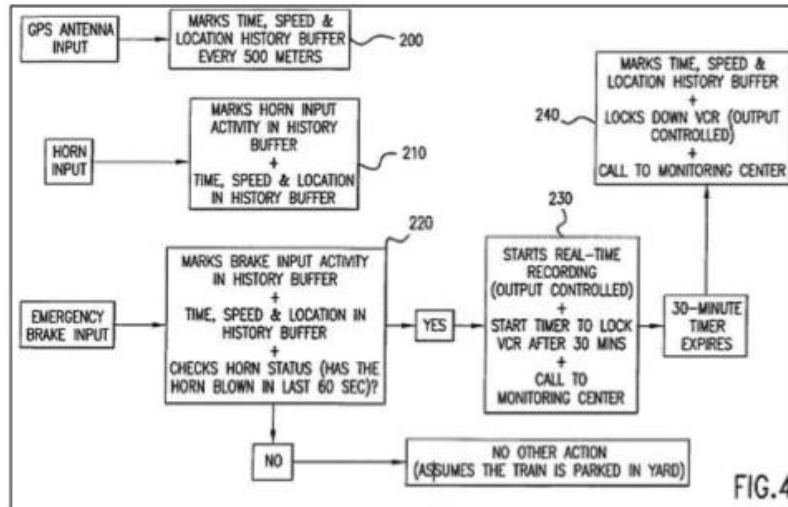
The specification sets forth an exemplary configuration of the system:



Id. at FIG. 2.

As explained in the specification, the system includes a video camera positioned to view the approaching railroad crossing, along with at least two recording devices (in this case VCRs) that are used to record the video. *Id.* at 1:67-2:15. Two recording devices are used to allow for continuous recording of the video and account for the time it takes to rewind each VHS tape. *Id.* at 2:36-52. Without a “lock down” event, the tapes are continuously recorded over by replacing the prior footage with new footage. *Id.* A control unit receives input from various sensors, including a horn sensor and an emergency brake sensor, and controls the recording devices. *Id.* at 2:50-58; FIG. 2.

A flow chart depicting the monitoring method is shown in FIG. 4:



Id. at FIG. 4.

With reference to FIG. 4, the system receives various inputs regarding the operation of the train, including a horn input (step 210) and an emergency brake input (step 220). *See id.* at 3:19-25, 31-43. Upon receiving the horn input (*i.e.*, the horn was activated), the system notes the time at which the horn input was received. *Id.* at 3:31-36. Likewise, upon receiving the emergency brake input (*i.e.*, the brake was activated), the system notes the time at which the brake input was received and also checks to see “whether the horn was blown within a predetermined time window of the brake detection event, such as for example, 60 seconds.” *Id.* at 3:38-47, FIG. 4 (step 220). Blowing the horn within the predetermined time window of the brake detection event is considered an alarm event “indicative of a potential accident.” *Id.* at 3:54-58.

If this alarm event is detected (indicated by the “YES” box in FIG. 4), the system starts a timer and terminates further recording by the recording devices after a predetermined period of time has elapsed (*e.g.*, 30 minutes) to “lock down” the

recording devices (*i.e.*, stop recording) and avoid recording over the video of the potential accident. *Id.* at 3:60-66, FIG. 4 (step 230). However, if both the horn and the emergency brake were not applied within the predetermined time window (indicated by the “NO” box in FIG. 4), then no action is taken, and the recording devices continue to record. *Id.* at 4:35-40, FIG. 4 (step 220).

Along with this preferred embodiment, the ’635 Patent claims two methods for “visually recording a potential accident of a railroad vehicle[.]” *Id.* at 6:21-38, 8:20-34.

II. Procedural background.

Rail Assets filed its complaint alleging that Wabtec’s “predecessor-in-interest copied Rail Assets’ patented technology and incorporated [it] into its railroad vehicle recorder systems,” specifically a product called “LocoCAM.” ECF 1, ¶ 22. According to Rail Assets, Wabtec’s allegedly infringing products use “at least the patented methods claimed in the ’635 Patent.” *Id.* at ¶ 23. Wabtec, for its part, denies any infringement and raises several affirmative defenses, including invalidity. *See* ECF 10.

LEGAL STANDARD

The proper construction of a patent’s claims is a question of law. *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 837 (2015) (citation omitted). It is thus a district court’s responsibility to resolve parties’ disputes about the scope of claim terms. *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1361 (Fed. Cir. 2008). That said, a court need not “construe every limitation present in a patent’s asserted claims.” *Id.* at 1362. A dispute over a claim term with a “plain and ordinary

meaning” can be resolved by adopting that meaning without further construction, especially if the proposed further construction is “confusing, unhelpful, adds no clarity to the claim language itself, and is erroneous to the extent it attempts to narrow the claims by adding...limitations.” *ActiveVideo Networks, Inc. v. Verizon Commc’ns, Inc.*, 694 F.3d 1312, 1325-26 (Fed. Cir. 2012).

Claim construction must begin with an analysis of the claims themselves. *Scanner Techs. Corp. v. ICOS Vision Sys. Corp.*, 365 F.3d 1299, 1303 (Fed. Cir. 2004). The words of a claim “are generally given their ordinary and customary meaning[.]” *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). “[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (citations omitted). “The inquiry into how a person of ordinary skill in the art understands a claim term provides an objective baseline from which to begin claim interpretation.” *Id.* (citation omitted).

But claim terms “must be construed in light of the specification and prosecution history, and cannot be considered in isolation.” *GE Lighting Solutions, LLC v. AgiLight, Inc.*, 750 F.3d 1304, 1308-09 (Fed. Cir. 2014) (citation omitted). That is, “the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in

the context of the entire patent, including the specification.” *Phillips*, 415 F.3d at 1313.¹

“The specification is the single best guide to the meaning of a disputed claim term and is, thus, the primary basis for construing the claims.” *Trustees of Columbia Univ. in City of N.Y. v. Symantec Corp.*, 811 F.3d 1359, 1362 (Fed. Cir. 2016) (cleaned up). That’s because the specification is “a concordance for the claims,” since, by statute, the specification must “describe the manner and process of making and using the patented invention” in “full” and “exact” terms. *Phillips*, 415 F.3d at 1315 (cleaned up). Although the specification may aid the court in interpreting the meaning of disputed language in the claims, particular embodiments and examples appearing in the specification will not generally be read into the claims. *Id.* at 1323. In other words, the court must be mindful to not import limitations from the specification into the claim. *Id.*

“In addition to consulting the specification,” a “court should also consider the patent’s prosecution history, if it is in evidence.” *Id.* at 1317 (cleaned up). The “prosecution history” consists of “the complete record of the proceedings before the PTO and includes the prior art cited during the examination of the patent.” *Id.* (citation omitted). “Like the specification, the prosecution history provides evidence

¹ Rail Assets asserts that a person of ordinary skill in the art as of the priority date of the ’635 Patent would “have a Bachelor of Science degree in software, hardware or mechanical engineering, or a related discipline, with at least 5 years of work experience in the field of railroad safety or control systems.” ECF 36, pp. 5-6. Wabtec “generally agrees” with this description, “but contends that at least some of the required work experience could be in a different area of transportation (e.g., airplanes or automobiles).” ECF 40, p. 7. The Court adopts this agreed-to standard, with Wabtec’s minor modification, in construing the claims here.

of how the PTO and the inventor understood the patent.” *Id.* (citation omitted). That said, because “the prosecution history represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation, it often lacks the clarity of the specification and thus is less useful for claim construction purposes.” *Id.* (citations omitted). “Nonetheless, the prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.” *Id.* (citations omitted).

Finally, courts may consider extrinsic evidence, such as expert testimony, dictionaries, and treatises, but “such evidence is generally of less significance than the intrinsic record.” *VirnetX, Inc. v. Cisco Sys., Inc.*, 767 F.3d 1308, 1316 (Fed. Cir. 2014) (citations omitted). When considering extrinsic evidence, however, courts cannot use it “to contradict claim meaning that is unambiguous in light of the intrinsic evidence.” *Phillips*, 415 F.3d at 1324.

DISCUSSION & ANALYSIS

The parties have asked the Court to construe three disputed claim terms, which are found in independent Claims 1 and 16 of the '635 Patent.² These terms are:

² Claim 1 states:

A method for visually recording a potential accident of a railroad vehicle, comprising steps of:

- (a) continuously monitoring the status of an emergency brake of the railroad vehicle;

Number	Term
1	“for a predetermined period of time”
2	“the predetermined time window”
3	“after detecting that, at least, the application of the emergency brake and horn blast occurred within the predetermined time window”

-
- (b) continuously monitoring the status of a horn of the railroad vehicle;
 - (c) continuously viewing with a video camera the scene that the railroad vehicle approaches;
 - (d) continuously storing video information from the video camera;
 - (e) detecting at least, the application of both the emergency brake and blast of the horn within a predetermined time window; and
 - (f) capturing video information from the video camera for a predetermined period of time after detecting that, at least, the application of the emergency brake and horn blast occurred within the predetermined time window.

ECF 1-2, 6:21-38.

Claim 16 states:

A method for visually recording a potential accident of a railroad vehicle, comprising steps of:

- (a) monitoring the status of an emergency brake of the railroad vehicle;
- (b) monitoring the status of a horn of the railroad vehicle;
- (c) detecting, at least, the application of both the emergency brake and blast of the horn within a predetermined time window; and
- (d) capturing video information from a video device that view a scene that the railroad vehicle approaches, the video information captured for a predetermined period of time after detecting that, at least, the application of the emergency brake and horn blast occurred within the predetermined time window.

Id. at 8:20-34.

To aid the Court's construction, the parties mainly rely on the same intrinsic evidence, which includes the '635 Patent and its prosecution history. *See* ECF 35. In addition to this intrinsic evidence, Rail Assets offered declarations from two persons having ordinary skill in the art, or "POSITAs." These declarations provide background on the existing technology at the time of the '635 Patent, the purpose of the '635 Patent, the parties' history as to the '635 Patent, and the purported scope of the claims of the '635 Patent. *See* ECF 36-1; ECF 36-5. Wabtec did not provide or rely on any expert declarations or testimony.

At the *Markman* hearing, both sides presented a technology tutorial with an accompanying slideshow presentation. Neither side elected to call witnesses. Instead, at the end of their technology tutorials, the parties provided argument on their respective claim constructions.

Based on this record, the Court will now discuss each of the three disputed terms, in turn, below.

I. Disputed Term 1: "for a predetermined period of time."

Claim Term	Rail Assets's Proposal	Wabtec's Proposal
"for a predetermined period of time"	No construction necessary; plain and ordinary meaning <i>Alternative:</i> "for a period of time determined beforehand"	"for a specific duration of time, the length of which is set in advance" <i>Alternative:</i> "for a fixed duration of time, the length of which is set in advance."

Wabtec argues that “predetermined period of time” should be construed to mean “a time of a specific duration.” ECF 40, p. 9. If the precise meaning of “specific” is unclear, Wabtec concedes that “fixed” is an acceptable alternative. *Id.* at p. 11.

According to Rail Assets, the term “for a predetermined period of time” uses “language that is readily understandable.” ECF 36, p. 11. As a result, Rail Assets argues that the Court should not construe this term at all, but should instead simply give the term its plain and ordinary meaning.

After carefully reviewing the intrinsic evidence, the Court will adopt a hybrid of Wabtec’s and Rail Assets’s proposed alternative constructions. That is, the Court construes “for a predetermined period of time” as “for a fixed duration of time that is determined beforehand.”

The Court starts, as it must, with the language of the claims. The disputed term appears in asserted Claims 1 and 16 of the ‘635 Patent. In both claims, the phrase “predetermined period of time” is used to describe the length of the video capture. *See* ECF 1-2, 6:35-39, 8:28-33. In that context, “predetermined” is meant to reflect that the amount of video capture will be decided beforehand. *See ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1088 (Fed. Cir. 2003) (the “context of the surrounding words of the claim ... must be considered in determining the ordinary and customary meaning of those terms”). To be decided beforehand, the amount of time must be of a fixed duration. That’s true because an amount of time of indefinite or relative duration could not be determined in advance, since the duration is only

known once the time period has expired. The Court's construction makes this distinction clear and gives full effect to the words of the claims.

The Court's construction also tracks the specification. In several places, the specification describes the "predetermined period of time" as a duration of time that is of a fixed length. For example, FIG. 4, which "show[s] the monitoring method according to the present invention," uses a timer that starts once the potential accident is detected and runs for a fixed length of time (30 minutes, in that example). ECF 1-2, 1:52-53, 3:60-4:1, FIG. 4. This same concept—a "predetermined period of time" being a fixed duration implemented by a timer—is again described in the embodiment reflected in FIG. 5. *Id.* at 5:10-15.

Rail Assets raises two objections to this construction, neither of which is ultimately persuasive.

First, Rail Assets argues that it is unnecessary to clarify the scope of the claim or the meaning of the terms. *See* ECF 36, pp. 11-13. According to Rail Assets, Wabtec's proposed construction just swaps out the language from the claims with unnecessary synonyms. *Id.* But that isn't the case. The parties' dispute is whether the "period of time" in the disputed claim means an amount of time that is of a defined length. The Court's construction resolves that dispute. "Fixed," in this context, means "not subject to change or fluctuation." *Fixed*, Merriam-Webster Dictionary (2020). And when used along with "duration," it clarifies that an exact amount of time—that will not change—will be used. The phrase "determined beforehand" describes the concept of "predetermined," and adheres to both Rail Assets's

alternative construction and the plain meaning of those words. *See, e.g., Homeland Housewares, LLC v. Whirlpool Corp.*, 865 F.3d 1372, 1375-76 (Fed. Cir. 2017) (noting that the plain meaning of the word “predetermined” is “determined beforehand”).

Second, Rail Assets argues that the Court’s construction “will likely confuse the jury” by leaving open “the question of whether the related activity (‘capturing’ video information) must cease or may continue outside of the relevant time period.” ECF 42, p. 4. Rail Assets asserts that the Court’s construction would be “at odds” with the reminder of the claim language that discusses continuous “storage” of the video information. *Id.* The Court doesn’t see it that way. As Rail Assets concedes, “capturing” and “storing” information are separate concepts. ECF 49, 11:6-20. While “storing” occurs continuously in other parts of the asserted claims, “capturing” must occur for a fixed duration. Rather than creating the confusion that Rail Assets alleges, the construction preserves and clarifies the important distinction between these two concepts.

In the end, Rail Assets concedes that it doesn’t have any substantive objection to the precise words used in the Court’s construction. *See id.* at 34:10-15 (“Again, the disputed Term 1, just to recap, they aren’t substantially in dispute.”). Instead, Rail Assets raises the specter of some unidentified, “unintended consequences” that may arise if the Court construes the term. *Id.* at 29:21-25 (“I can’t with respect to Claim Term 1 tell you there’s a specific concern I have other than I think this is an example of a term that just doesn’t need that sort of construction, that sort of intervention at this point.”). But that vague concern isn’t enough to persuade the Court to abdicate

its responsibility to resolve the parties' dispute about the scope of the claims. And as the Federal Circuit has explained, "a sound claim construction need not always purge every shred of ambiguity. The resolution of some line-drawing problems ... is properly left to the trier of fact." *Acumed LLC v. Stryker Corp.*, 483 F.3d 800, 806 (Fed. Cir. 2007). The Court has construed the disputed term with the "specificity and precision" that is "warranted by the language of the claim" and the rest of the intrinsic evidence. *PPG Indus. v. Guardian Indus. Corp.*, 156 F.3d 1351, 1355 (Fed. Cir. 1998).

Because the intrinsic evidence is clear regarding the meaning of this term, that ends the analysis and the Court need not consider the extrinsic evidence offered by Rail Assets.

II. Disputed Term 2: "the predetermined time window."

Claim Term	Rail Assets's Proposal	Wabtec's Proposal
"the predetermined time window"	<p>No construction necessary; plain and ordinary meaning</p> <p><i>Alternative:</i> "the period of time that was determined beforehand"</p>	<p>"a specific duration of time, the length of which is set in advance, within which certain events must occur relative to one another"</p> <p><i>Alternative:</i> "a fixed duration of time, the length of which is set in advance, within which certain events must occur relative to one another"</p>

Wabtec asks the Court to construe the term "predetermined time window" to mean "a specific duration of time, the length of which is set in advance, within which certain events must occur relative to one another." ECF 40, pp. 12-17. That's because, in the claims in which it appears, the "phrase is used in reference to

‘detecting’ the brake and horn within the ‘predetermined time window.’” *Id.* at p. 12. As with disputed term 1, Wabtec concedes that “fixed” is an acceptable substitution for “specific.” *Id.* at p. 14.

Rail Assets, on the other hand, believes that no construction of this term is necessary. In its view, the “predetermined time window” should simply be construed to “generally refer[] to ‘the period of time that was determined beforehand.’” ECF 36, p. 12. Rail Assets asserts that Wabtec’s construction “includes extraneous and unnecessary verbiage (‘within which certain events must occur relative to one another’) that is not required in construing the phrase, because its relation to other ‘events’ is evident from other elements of the claim.” *Id.* at p. 13.

The Court will, for the most part, adopt Wabtec’s proposed construction, but with a minor alteration to ensure consistency with the Court’s construction of “predetermined period of time.” That is, the Court will construe this term to mean “a fixed duration of time that is determined beforehand, within which certain events must occur relative to one another.”

The problem with Rail Assets’s approach is that it doesn’t properly distinguish between “predetermined time window” and “predetermined period of time.” Those are different phrases that appear in different parts of the claims. “Predetermined time window” appears first in the claim (limitation (e) of asserted Claim 1 and limitation (c) of asserted Claim 16). ECF 1-2, 6:32-34, 8:26-28. In both instances, the phrase refers to a duration of time within which certain events, namely the application of the horn and brake, occur relative to one another to indicate a potential

accident. *Id.* On the other hand, “predetermined period of time,” as discussed above, appears later in the claims and refers to how long video information is captured. *Id.* at 6:35-38, 8:28-34. Rail Assets even admits as much. ECF 49, 30:12-16 (“As we said, the term ‘a predetermined period of time’ is used with respect to the collection of information, and the term ‘predetermined time window’ is used with respect to the preservation of information.”). The Court must presume that different meanings attach to different words when construing claim language. *See Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corp.*, 93 F.3d 1572, 1579 (Fed. Cir. 1996) (reversing lower court’s ruling that a “pusher assembly” and a “pusher bar” have the same meaning). The Court’s construction maintains the distinction between these two phrases.

This construction also tracks the specification. The only usage of “predetermined time window” outside the claims and abstract is in reference to step 220 of Fig. 4. In that step, upon sensing the application of the emergency brake, the system checks to see “whether the horn was blown within a predetermined time window of the brake detection event, such as for example, 60 seconds.” ECF 1-2, 3:38-47. If the horn is blown within this window, it is considered indicative of a potential accident and the video capture is triggered. *Id.* at 3:54-58. If the horn is not blown within that time window, “then no further action is taken.” *Id.* at 4:35-40. Thus, in FIG. 4, the “predetermined time window” constitutes a fixed duration of time, determined beforehand, within which certain events must occur relative to one another.

The prosecution history is also instructive. “Any explanation, elaboration, or qualification presented by the inventor during patent examination is relevant, for the role of claim construction is to capture the scope of the actual invention that is disclosed, described, and patented.” *Fenner Invs., Ltd. v. Cellco P’ship*, 778 F.3d 1320, 1323 (Fed. Cir. 2015) (cleaned up). Several months after filing the application that became the ’635 Patent, the PTO issued an Office Action rejecting Claims 1, 2, 4-10, 12, 13, and 15 as obvious over the combination of U.S. Patent No. 5,978,718 to Kull and U.S. Patent No. 4,236,215 to Callahan, et al. ECF 40-2, pp. 3-6. In addressing this rejection, the patentees argued that certain elements of the rejected claims were missing from *Kull* because:

The rail vision system of *Kull*, in contrast, does not disclose either the capturing of video information for a predetermined period of time, or a predetermined time window ***in which certain events must occur relative to each other*** to trigger the capturing of video information. Consequently, *Kull* does not disclose or suggest at least three elements of claims as amended.

ECF 40-3, p. 9 (emphasis added). Thus, the language the patentees used to describe the invention to the examiner is the very same language that Wabtec now uses in its proposed construction.

Because of this prosecution history, the Court is not persuaded by Rail Assets’s assertion that it is “extraneous,” “confusing,” and “wrong” to include the phrase, “within which certain events must occur relative to one another,” as part of the claim construction. If this language was necessary to explain to the patent examiner how the invention was distinguishable from the prior art, it is equally necessary now to understand the scope of the patent’s claims.

The inclusion of that phrase also ensures that the construction doesn't improperly add an unjustified limitation to the claim. Claims 1 and 16 explicitly state that "at least" the "application of the emergency brake and horn blast" occur within the "predetermined time window." Adding "within which certain events must occur relative to one another" clarifies that while the specifically listed events may be sufficient, the scope of the claim is not limited to those events. The events could be something other than just the application of the emergency brake and horn. Put simply, the phrase ensures that the use of "at least" in the claim does not get lost in the shuffle.

Finally, Rail Assets argues that this construction is wrong because the "events" need not occur in any specific order 'relative to one another' ... and there is no need for any events to occur *only* during the time period that was determined beforehand[.]" ECF 36, p. 13 (emphasis in original). Yet the Court's construction creates neither problem. It does not require that any events occur in a specific ***order*** (*i.e.*, the brake must occur first and the horn second or vice versa); it only requires that they both occur. It also does not limit the events to only occurring during the predetermined time window.

In sum, the Court finds that the intrinsic evidence supports its construction of "predetermined time window" as "a fixed duration of time that is determined beforehand, within which certain events must occur relative to one another." And because the intrinsic evidence is clear, there is no need to resort to the extrinsic evidence offered by Rail Assets.

III. Disputed Term 3: “after detecting that, at least, the application of the emergency brake and horn blast occurred within the predetermined time window.”

Claim Term	Rail Assets’s Proposal	Wabtec’s Proposal
“after detecting that, at least, the application of the emergency brake and horn blast occurred within the predetermined time window”	No construction necessary; plain and ordinary meaning <i>Alternative:</i> “following a use of the brake and horn within a period time selected beforehand”	“in response to detecting, at least, the application of the emergency brake and horn blast occurred within the predetermined time window”

Wabtec asks the Court to construe this term as “in response to detecting that, at least, the application of the emergency brake and horn blast occurred within the predetermined time window.” ECF 40, p. 18. Essentially, Wabtec is asking the Court to replace the word “after” with the phrase “in response to.” Wabtec proposes this construction because it believes “a causal link between these events exists, such that video capture occurs ‘in response to’ detecting the horn and brake within the predetermined time window.” *Id.*

Rail Assets believes that this term is “readily understandable” and should be given its “plain and ordinary meaning.” ECF 36, p. 14. It accuses Wabtec of rewriting the term to “include limitations from the exemplary ‘preferred embodiment’ in the Specification ... in an attempt to manufacture a non-infringement argument[.]” *Id.* As an alternative, Rail Assets offers that the claim should be construed to mean that “following a use of the brake and horn within a period of time selected beforehand.” *Id.*

For this term, the Court will adopt a modified version of Rail Assets’s proposed construction. Specifically, the Court will construe the term as “following detecting that, at least, the application of the emergency brake and horn blast occurred within the predetermined time window.” In short, the Court will give “after” its plain and ordinary meaning of “following.”

Wabtec’s proposed construction of “after” as meaning “in response to” is not supported by the words of the claims.

Neither party suggests that “after” has a specialized meaning to persons of ordinary skill in the art. So “the ordinary meaning” of those words controls, “unless the evidence indicates that the inventor used them differently.” *Karlin Tech, Inc. v. Surgical Dynamics, Inc.*, 177 F.3d 968, 971 (Fed. Cir. 1999) (citation omitted). The relevant definition of “after” is “following in time or place.” *After*, Merriam-Webster Dictionary, <https://www.merriam-webster.com/dictionary/after>. Consistent with this definition, in the disputed claims, the word “after” is used to convey that video information will be captured following something else happening (*i.e.*, detecting, at least, the application of the emergency brake and horn blast occurred within the predetermined time window). Thus, contrary to Wabtec’s proposal, the words of the claims themselves do not reveal a direct causal connection between the events of capturing and detecting, but rather a temporal one.

Moreover, “in response to” is used in other unasserted claims, but not the asserted claims at issue. Claims 8 and 15, for example, claim that the apparatuses described will “capture” or “record” “in response” to detecting certain stimuli. ECF 1-

2, 7:9-18, 8:13-19. This demonstrates that the patentees knew how to deploy the term “in response to” when necessary, but deliberately chose not to do so in asserted Claims 1 and 16. *See, e.g., Pfizer Inc. v. Teva Pharm. USA, Inc.*, 555 F. App’x 961, 965–66 (Fed. Cir. 2014) (“Contrary to Appellants’ suggestion, the patentee’s use of the prefix in the tables demonstrates that it knew how to specify racemic 3–isobutylGABA as distinguished from the compound generally and chose not to do so in claim 2.”); *IBSA Institut Biochimique, S.A. v. Teva Pharm. USA, Inc.*, No. 18-555, 2019 WL 3936656, at *4 (D. Del. Aug. 20, 2019) (“It seems more likely to [the court] that the applicant’s citation to references that use the term ‘semi-liquid,’ coupled with his choice to use the term ‘half-liquid,’ indicates that he was aware of the term of art and chose not to use it.”), *aff’d*, 966 F.3d 1374 (Fed. Cir. 2020).

This deliberate choice is compelling evidence that “after” does not mean “in response to,” especially considering the longstanding rule of construction that “different words or phrases used in separate claims are presumed to indicate that the claims have different meanings and scope.” *Karlin*, 177 F.3d at 972 (citation omitted). Here, the use of the less restrictive word “after” shows that Claims 1 and 16, which set forth a general method for the invention, are intended to be broader in scope than Claims 8 and 15, which set out specific embodiments of the general method. *See W.L. Gore & Assocs., Inc. v. Medtronic, Inc.*, 834 F. Supp. 2d 465, 480 (E.D. Va. 2011) (“The Court finds ‘affixing’ should be construed in accordance with its plain and ordinary meaning” because “the claim language itself does not limit ‘affixing’ to any particular method and thus generally it should be construed broadly.”).

Another problem for Wabtec's proposed construction is that it is not supported by the specification. The term "after" is used eleven times in the specification, and each time the term means "following." *See* ECF 1-2, 2:6, 3:63, 3:66, 4:11, 4:25, 5:12, 5:20. As just one example, in the Detailed Description of the Drawings section, the '635 Patent states: "When a condition is detected that is indicative of the railroad vehicle's approach to a railroad crossing or other important conditions, the monitoring unit **100** terminates recording of video information after a predetermined period of time has elapsed." *Id.* at 2:2-6. Substituting "in response to" for "after" in that sentence would make little sense. The same holds true for the other uses of "after" in the specification. *See id.* at 3:63, 3:66, 4:11, 4:25, 5:12, 5:20. "It is well-established that claim terms are to be construed consistently throughout a patent[.]" *Blast Motion Inc. v. Diamond Kinetics, Inc.*, No. 17-733, 2018 WL 5276428, at *7 (W.D. Pa. Oct. 24, 2018) (cleaned up). The Court's construction accomplishes that consistency.

In effect, Wabtec's proposed construction would import a limitation from the preferred embodiment into the disputed claims. Rail Assets concedes that the "preferred embodiment disclosed in the '635 Patent do[es] perform some actions 'in response to' the detection of the application of the emergency brake and horn blast[.]" ECF 36, p. 17. But "particular embodiments and examples appearing in the specification will not generally be read into the claims." *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988). This is true even if, as is the case here, the patent only describes a single embodiment. *Phillips*, 415 F.3d at 1323. Even

in the single-embodiment scenario, the Federal Circuit has repeatedly instructed that the claims of the patent must not be construed as limited to that embodiment unless the patentee has shown a clear intention to limit the claim scope using “words or expressions of manifest exclusion or restriction.” *Id.* at 1319. No such words were used in the ’635 Patent.

In fact, quite the opposite. The ’635 Patent expressly states that the scope of the claims is not limited to the preferred embodiment, which was only provided by way of example and not limitation. ECF 1-2, 6:17-19 (“The above description is intended *by way of example only* and is *not intended to limit the present invention in any way* except as set forth in the following claims.”).

Wabtec’s last stand is that the scope of the asserted claims should be limited or restricted based on arguments made by the patentees during prosecution. Limiting the scope of a patent claim using arguments during prosecution requires “clear and unmistakable surrender of subject matter.” *Conoco, Inc. v. Energy Envtl. Int’l, L.C.*, 460 F.3d 1349, 1364 (Fed. Cir. 2006) (cleaned up). Statements about the difficulties and failures in the prior art, without more, do not act to surrender claim scope. *See Spine Solutions, Inc. v. Medtronic Sofamor Danek USA, Inc.*, 620 F.3d 1305, 1315 (Fed. Cir. 2010). “The relevant inquiry is whether a competitor would reasonably believe that the applicant had surrendered the relevant subject matter.” *Conoco*, 460 F.3d at 1364 (cleaned up).

There is no clear and unmistakable surrender here. Wabtec focuses on the reference to a “trigger” in the patentees’ attempt to traverse the *Kull* and *Callahan*

prior art as part of the Response to the Office Action. ECF 40, pp. 18-21. According to Wabtec, “trigger” connotes a causal connection. *Id.* However, after reading the entire Response to the Office Action in which that reference is found, the Court views the “statements as amenable to multiple reasonable interpretations.” *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1324 (Fed. Cir. 2003) (cleaned up). Thus, these statements are too ambiguous to “support the judicial narrowing of a clear claim term.” *Id.* (cleaned up).

Some context is in order. In the Office Action, the examiner identified together a group of claims that were potentially rendered obvious by the prior art. That grouping included both method and apparatus claims, including Claims 1 and 15. As noted above, Claim 1 is the main independent claim at issue—and it is a method claim, which uses the term “after” in reference to the application of the horn and brake. But Claim 15 is an apparatus claim, which speaks to one embodiment of the invention and uses the term “in response to” in reference to the application of the horn and brake.

Just as the claims were grouped by the examiner, the patentees responded by addressing all of those claims together, rather than addressing the method claims (*e.g.*, Claim 1, using the term “after”) separate from the apparatus claims (*e.g.*, Claim 15, using the term “in response to”). In traversing the prior art (specifically, *Kull*), the patentees provided these explanations for how their claims may be different:

The rail vision system of *Kull*, in contrast, does not disclose either the capturing of video information for a predetermined period of time, or a predetermined time window in which certain events must occur relative to each other to trigger the capturing of video information.

ECF 40-3, p. 9.

To be sure, the patentees did address “trigger” as part of the latter part of this explanation. But, in context, it is impossible to say whether this explanation applied to all, or only some, of the claims identified by the examiner. This is significant because, again, Claim 1 uses the term “after,” but Claim 15 uses the term “in response thereto.” In other words, it is unclear whether the explanation by the patentees during prosecution was meant to apply to essentially define the term “after” in Claim 1, thereby limiting the scope of that claim to a causal type of event. Under these circumstances, the Court cannot find that the patentees “clearly and unmistakably” surrendered the scope of the claim as part of the prosecution history.

Because the prosecution history is not enough to overcome the clear meaning of “after” established by the rest of the intrinsic evidence, the Court declines to adopt Wabtec’s construction and will instead, consistent with Rail Assets’s position, construe “after” as “following.”

CONCLUSION

Having fully considered the record and the arguments of counsel, the Court construes the disputed claim terms as follows:

Claim Term	The Court's Construction
"for a predetermined period of time"	"for a fixed duration of time that is determined beforehand"
"the predetermined time window"	"a fixed duration of time that is determined beforehand, within which certain events must occur relative to one another"
"after detecting that, at least, the application of the emergency brake and horn blast occurred within the predetermined time window"	"following detecting that, at least, the application of the emergency brake and horn blast occurred within the predetermined time window"

An appropriate order consistent with this opinion will follow.

Dated this 23rd day of February, 2021.

BY THE COURT:

/s/ J. Nicholas Ranjan
United States District Judge